

# RNA Molecules

## **Messenger RNA (mRNA):**

- Making of mRNA (copying of DNA) is **transcription**

## **Transfer RNA (tRNA):**

- Carries amino acids to mRNA
- Carries anticodon to mRNA
- **Translates** a codon of mRNA into an amino acid

## **Ribosomal RNA (rRNA):**

- Provides structure and enzyme activity for ribosomes

# RNA Molecules

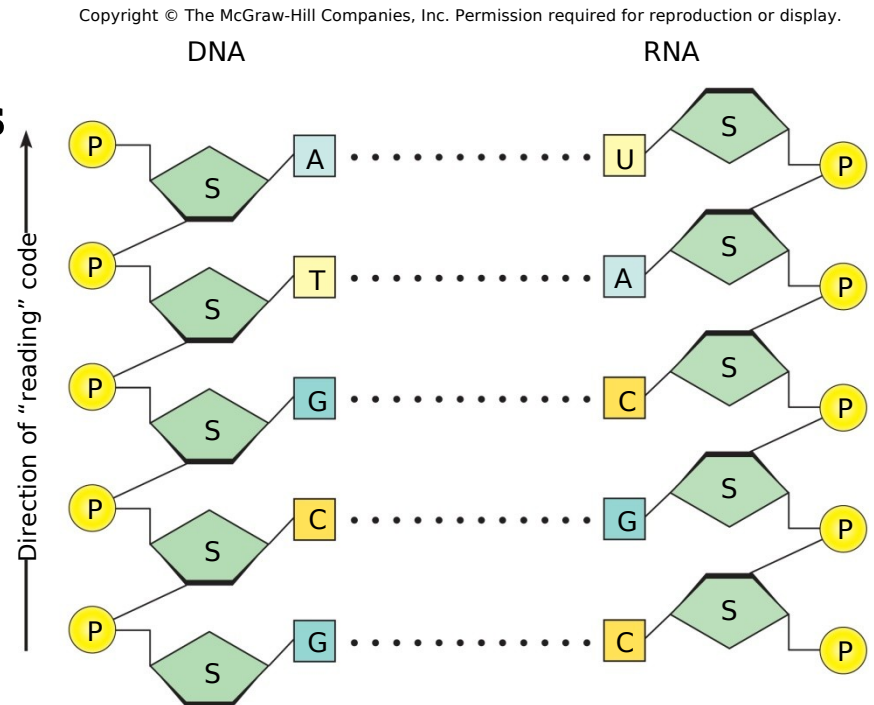
- **Messenger RNA (mRNA):**

- **Delivers genetic information from nucleus to the cytoplasm**

- **Single polynucleotide chain**

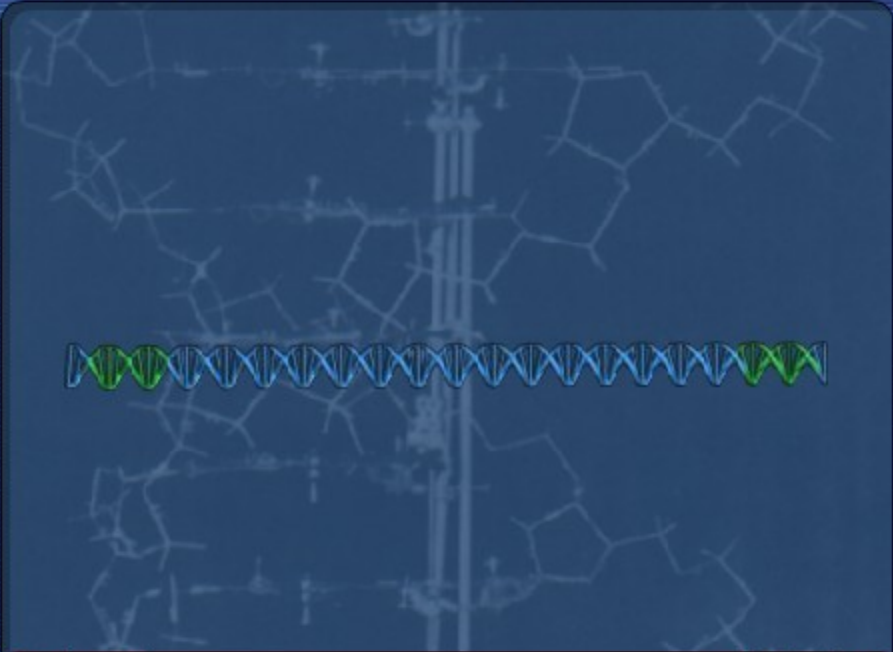
- **Formed beside a strand of DNA**

- **RNA nucleotides are complementary to DNA nucleotides (exception - no thymine in RNA;**



# Animation: Stages of Transcription

**Mc Graw Hill** Stages of Transcription



A structural gene is made up of a sequence of bases in a DNA molecule consisting of a coding region with an upstream promoter and a terminator downstream of the coding region.

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# Animation: How Translation Works

**McGraw-Hill** **How Translation Works**



DNA

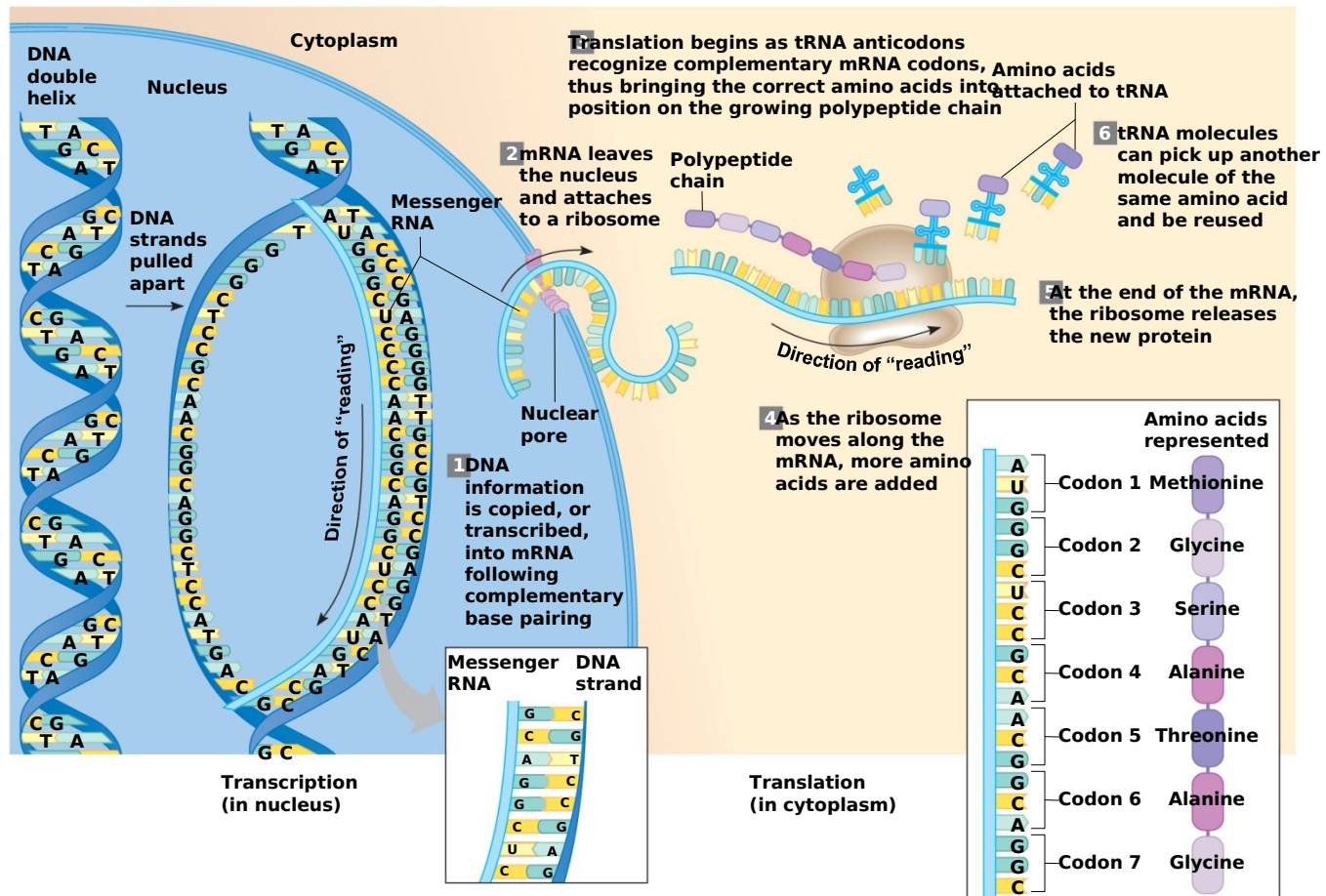
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The genetic information stored in DNA is transcribed into messenger RNA and then translated into protein.

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# Protein Synthesis

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